

JIMAR, PFRP ANNUAL PROGRESS REPORT FY 2002

P.I. Name: Sam Pooley

Project Proposal Title: Regulatory Impact Analysis Framework for Hawaii Pelagic Fishery Management

Funding Agency: Pelagic Fisheries Research Program/NOAA

Project Purpose and Indicative Results: The objective of this project was to revise the multi-level, multi-objective programming model for the Hawaii fishery created by the Leung project (PFRP #2066/2113) by making it more tractable for regulatory analysis. This would involve revising the basic model structure to allow more flexible time-area specification as well as updating the underlying data. The update focuses on the Hawaii longline fishery.

Project Activities and Progress During FY 2002: The intended research associates for this project subsequently made other commitments since project funding would lapse in July 2002. Nonetheless the first research assistant, Dr. Xiulin Gu, thoroughly documented the model's GAMS programs and identified a number of issues concerning the inter-relationship of parameters in the model and the data demands for seeding the GAMS program. Mr. Keiichi Nemot, graduate research assistant, was picked up in the Spring of 2002 and has accomplished most of the initial tasks in the project objectives. This includes modifying the GAMS program to be simpler and more visible so that it can be easily adjusted to a different schema of area, season, target and species. He is also developing a dta processor that could flexibly generate the parameters for 5 to 8 rectangular areas that are more realistic for fisheries management. The latter use existing up-to-date monthly 1-degree summary data provided from the NMFS longline logbook program.

Planned Project Activities for FY 2003: No further funding from PFRP is available. We expect to complete the project using in-house funds and prepare an in-house project report with secondary funds.

Papers Published in Journals During FY 2002: None

Other Papers, Reports, and Presentations During FY 2002:

Gu, Xiulin. 2001. Assessment of fishing capacity in domestic fisheries: Hawaii based longline fleet. (informal project report).

Gu, Xiulin. 2001. Sensitivity analysis, non-inferiority set estimation, and a multiobjective programming model. (informal project report).

Graduating Students with M.S. or Ph.D. Degrees During FY 2002: None.